

# Close Reasoning

**T**HE *London Close Reasoner*, or *LCR*, is a series of Notes aimed at the promotion of Close Reasoning. In this first Note we consider what Close Reasoning is.

### 1. Close Reasoning: What

*Reasoning* we define as the process of adjusting thoughts to make them more rational. This includes both single thoughts and also whole systems of thoughts, or thought structures. *Close* reasoning is reasoning that observes a very high standard of rationality in doing this; *loose* reasoning is satisfied with a low standard, or none at all.

That is reasoning as it goes on in the individual; we call it *private* reasoning. There is also such a thing as *public* reasoning; this occurs when one person reasons with another, and several people may find themselves adjusting their thoughts. This is of great importance, and is discussed below.

### 1.1. The Scope of Close Reasoning

The *LCR* attributes a wider scope to Close Reasoning than do many of the books on the subject. Some comments on the terms used in the above definitions will give a sense of this breadth

### 1.1.1. Thoughts

The *LCR* counts as thoughts anything that might go on in our heads that could be the target of rational criticism. This includes our beliefs and opinions, our ideas and concepts, our wishes, desires, preferences, our intentions and plans of action, even our attitudes, emotions and feelings, our moral convictions and principles, our articles of faith, our loyalties. All of these things can be looked at from the point of view of rationality.<sup>1</sup>

This is a much broader view than is to be found in the majority of books on this subject. The tradition has been to concentrate on beliefs and opinions, or

at the level of language, on propositions and statements, to the exclusion of other thoughts and forms of speech. The focus has always been on items that may be said to be either true or false. The attitude of Aristotle is typical:

- **Aristotle:** (c. 350 BC)

We call propositions those [sentences] only that have truth or falsity in them. A prayer is, for instance, a sentence but has neither truth nor falsity. Let us pass over all such, as their study more properly belongs to the province of rhetoric or poetry.

(On Interpretation, 16<sup>a</sup>4.2)

But a prayer *can* be criticized from the point of view of rationality, as the King in *Hamlet* comes to see when he tries to pray for forgiveness, though unwilling to give up the gains for the sake of which he committed his crime:

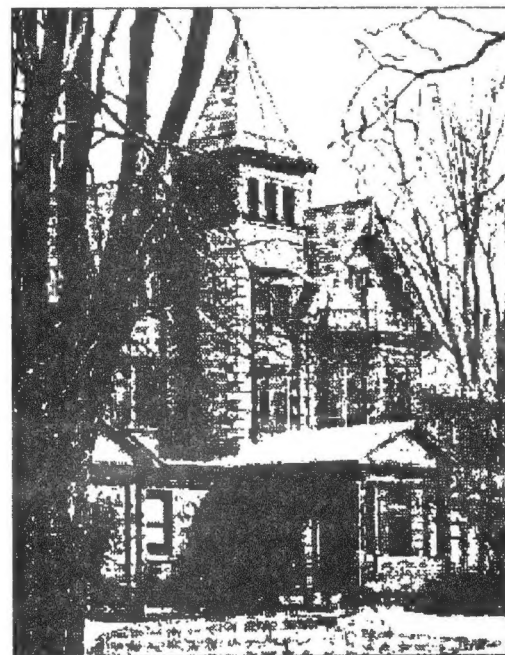
- **Shakespeare:** (c. 1602)

My fault is past. But O, what form  
of prayer  
Can serve my turn? 'Forgive me  
my foul murder'?  
That cannot be, since I am still  
possess'd  
Of those effects for which I did  
the murder,  
My crown, mine own ambition  
and my queen.  
May one be pardon'd and retain  
the offence?

Try what repentance can: what  
can it not?  
Yet what can it when one cannot  
repent?

(*Hamlet*, Act III, Scene iii.)

Clearly a thought structure open to criticism from the point of view of rationality.



Other forms of thought, too, can be assessed as rational or irrational. Intentions can be irrational, as when I intend to reach a certain goal without intending to do the necessary work. Emotions can be irrational, as when I continue to be angry with my friend after I learn that she did not in fact do the thing that I was angry at her for. In all such cases there is room for adjustment of thoughts to make them more rational.

So, though the tradition is no doubt correct in placing primary emphasis on the importance of having true and rational beliefs, we must not overlook the importance of rationality in other modes of thought.

### 1.1.2. Reasoning and Inference

Not only has tradition tended to restrict attention to beliefs and opinions to the exclusion of other forms of thought; it has also tended to focus exclusively on one special case of reasoning about beliefs and opinions. This is the case known as *inference*, in which rationality requires you to add a certain new belief, given your old ones. For example, if you believe that all bankers

are tightwads and that Mrs. Smith is a banker, then you may reason to the new belief that Mrs. Smith is tightwad.

But in all such cases<sup>3</sup> you have an option; instead of adding the new belief you can modify or abandon the old. You may give up the belief that all bankers are tightwads, for example. Deciding whether or not to exercise this option is also reasoning in the sense of the LCR, but not inference. There is more to reasoning than inference.

This broader conception is by no means unknown to logical tradition, though it has not dominated in the present century. For example, it is endorsed in a famous, and useful, textbook of the 18th century by Isaac Watts:

• **Isaac Watts: (1724)**

The Word Reason in this Place is not confined to the mere Faculty of reasoning or inferring one Thing from another, but includes all the intellectual Powers of Man.<sup>4</sup>

(*Logic*, p. 1.)

Though Watts narrows the verb "reason" down to "infer", his real interest is in the noun "Reason"; the proper exercise of that faculty, in the broad sense, is what both Watts and the LCR are concerned with; we call it *Close Reasoning*.

## 1.2. Rationality

In reasoning we try to make our thoughts more rational, and in Close Reasoning we set high standards. But what is this rationality, exactly, and what are these standards?

This is a surprisingly difficult question, and we cannot attempt a full

answer here; if you pursue this question earnestly you will be led deep into several branches of philosophy, and you will have to study other fields as well, such as economics and mathematics, not to mention formal logic.

Even so, the LCR, without going that far, will in these studies go some distance towards explaining what rationality is. Indeed, every one of the Notes will seek to enrich our understanding of that notion.

Here at the outset the most we can expect is a working definition, something around which to organize ideas as the inquiry proceeds. We provide that by starting with the negative: *rationality*; we say, is the avoidance of irrationality. And we explain *irrationality*, to a degree, by listing a few types.

### 1.2.1. Deductive Logic

The most glaring form of irrationality is flat out self-contradiction; believing, for example, that all sinners should be forgiven and also that some sinners are beyond forgiveness. This one is pretty obvious, but contradictions can take subtle and intricate forms, and it is surprising how much of rationality consists simply in avoiding contradiction. As it turns out, the whole of deductive logic, with all its convolutions, is based on that.

### 1.2.2. Inductive Logic

Another form of irrationality arises when the strength of belief is not in proportion to that of the evidence upon which it is based. In 1981, for example, on the basis of slim evidence, the Reagan administration in the U.S. became convinced that the communists were using a poison weapon. "Yellow Rain", in Asia, and made strong public

statements about it; it is now known, though not admitted even now by U.S. officials, that these accusations were simply false.<sup>5</sup> Strength of U.S. belief in the Yellow Rain charge was out of all proportion to the strength of the evidence. We will learn something about this form of irrationality when we study inductive logic, probability, and related topics.

### 1.2.3. Decision Theory

Still another form of irrationality has to do with desires and preferences. Suppose I'd rather party than study, and I'd rather study than clean house, and yet, given a choice between partying and cleaning house, I choose to clean house. There seems to be an irrationality or incoherence here in my system of values. This kind of thing will be considered under the general heading of decision theory.

## 1.3. Standards

In all the areas where we can criticize thoughts on the ground of irrationality it is possible to find standards of rationality, some more demanding than others. In some areas, such as mathematical logic, these standards are clear cut, though somewhat complicated. In others, such as the acceptance of new scientific theories, they are less definite, and there is disagreement among the experts about details.

In still other areas, such as that of our most basic values, there is dispute whether there even are any standards of rationality, and so, whether rational criticism is really possible. We take this as a sign that there are limits to the power of reason, and that it is not clear just where those limits lie. Close Reasoners go as far as they can in pursuit



King Street

Talbot Street

of rationality, and push against the limits.

#### 1.4. Adjusting thoughts

Reasoning, we have said, is a process of adjusting thoughts; what sort of adjustment do we have in mind? Well, any kind, really; whatever it takes to make your thoughts, your whole system of thoughts, more rational.

On occasion you may want to take out your axe and go to work in a big way. You may totally abandon certain beliefs, or take on new beliefs; you may change your politics from the ground up. You may change your attitude towards a certain person and seek a divorce. You may join, or quit, a church.

The famous philosopher and scientist René Descartes (1596-1650), for one, was a strong believer in the radical approach. He recommended a sort of total house cleaning in which you throw out all of your beliefs that are in any way doubtful. This means that you strip your thinking down to the bare minimum, which for Descartes is the point at which the only thing you know is that you are thinking, and so exist. This is his famous "cogito ergo sum—I think, therefore I am." After you reach that point, according to the plan, you bring back old beliefs, or replace them with new ones, provided in every case that you are certain that the belief has an absolutely solid basis. There has been a lot of discussion among philosophers about just which beliefs, if any, can pass this test.

The *LCR* will not be recommending such drastic measures; in the majority of cases it is quite enough to do the adjusting on a smaller scale. We do not totally abandon a belief, but we add

qualifications to it, or modify our degree of confidence in it. We draw distinctions, and separate out things that we used to lump together. We suspend judgment and seek further evidence before making up our minds. We take note of risks, and prepare contingency plans before leaping into action. But this is not to deny that sometimes major overhauls are required.

It happens occasionally that people get into a situation where it is reasonably clear what adjustment is required, but they find themselves unable actually to make that adjustment. There are people who know perfectly well that garter snakes are harmless, but are quite unable to put this belief into practice by taking the snake into their hands. Often this is because strong emotions are involved, either in the present or in the past. The *LCR* will not be much help with that problem; if it gets really bad see your psychiatrist. The aim of the *LCR* is merely to help with the easier task of discovering what changes ought to be made.

#### 1.5. Public reasoning

Private reasoning is more fundamental than public reasoning since, in the end, we each have to think for ourselves, even if what we think is that we should let others decide for us. Yet public reasoning exists, and is tremendously important; a great deal of our reasoning consists in trying to play our part, as best we can, in public reasoning of one sort or another.

Public reasoning has traditionally been at the centre of logical studies, and rightly so; it will occupy a major part of our attention. Here we limit ourselves to distinguishing three main

types of public reasoning:

- *Dialogue*
- *Debate*
- *Presentation*

##### 1.5.1. Dialogue

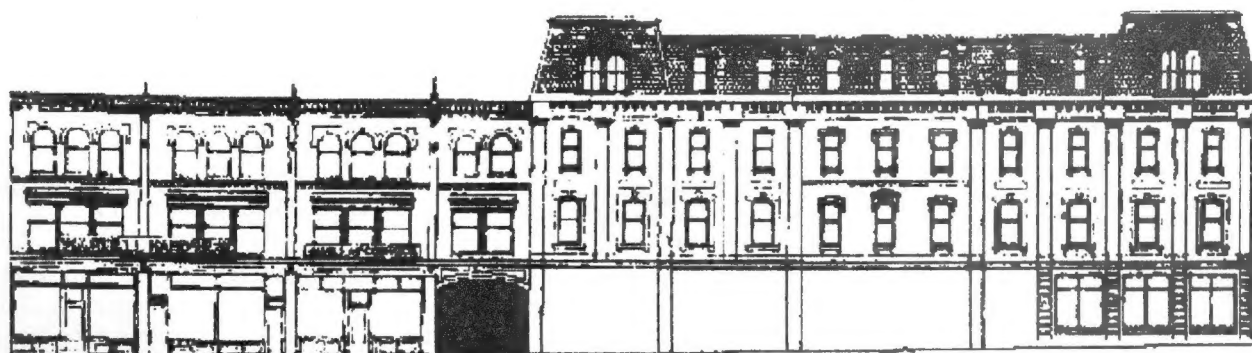
*Dialogue*, in our sense, is the kind of public reasoning in which two or more persons co-operate in reasoning. Through discussion, they help each other to become more rational about some issue.

The *LCR* considers dialogue to be the ideal form of public reasoning, and attaches great value to it. Engaging in it is perhaps the single most important method by which we improve our rationality. For this reason it has been much esteemed by philosophers since the time of Socrates.

The reason for its usefulness lies in the fact that though our reasoning powers are sadly limited, the limitations can in some measure be overcome with the help of others. "Two heads are better than one" is the appropriate slogan, and it states a profound truth.

Dialogue, or perhaps we should say true dialogue, is public reasoning entered into in this spirit. It is a co-operative endeavour aimed at coming jointly to the most rational conclusion, and is marked by sincerity, openness and helpfulness, and by intelligent listening as well as speaking.

And it almost never occurs in its pure form. Ego gets in the way; we forget that the aim is to discover the truth, and we aim merely to win the argument. Or we seek simply to show off our cleverness. Still, we often come close to true dialogue, and our approximations are always valuable. They



Talbot Street

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become more valuable when the rules and methods of Close Reasoning are employed.

### 1.5.2. Debate

*Debate* can take many forms; the common feature is that two or more participants propose, and seek to establish and maintain, opposing views about some issue. Usually this is for the benefit of a non-participating judge or audience, since the debaters do not really expect to persuade each other. The goal is to stand firm and hold your ground, and to make it appear that you are right and your opponent wrong; to be persuaded by an opponent would be to lose the debate.

Sometimes debating can be a mere academic exercise, but it is also a vitally important activity in many parts of life. Our adversarial system of law is built on it; two sides debate for the benefit of judge and jury. It is also central to the operation of parliaments, and of the countless other deliberative bodies to be found in a democratic society.

The importance of debating in public life has always been recognized, and one of the main motives for the invention, teaching and study of logic has been to prepare people to engage more effectively in it. In past centuries this was intended chiefly for young men of the upper classes, who alone had need and opportunity to debate. (No one needed a milkmaid or swineherd with debating skills.)

The *LCR* also values debate, even for milkmaids and swineherds, and has suggestions to make about the proper conduct of it, both for participants and for the audience. And it advises the Close Reasoner to be wary when involved in any way with debate; the debater is not out to help, as in dialogue, but to win or convince, and we must be on our guard.

### 1.5.3. Presentation

In dialogue and debate there is give and take, but there is also a one-way form of public reasoning in which there is a 'sender' and a 'receiver', and they do not change roles. We will call this *presentation*.

When we deal with presentations, we are usually on the receiving end. This happens when we read books, magazines or newspapers in which reasoning

is presented, or when we encounter reasoning on television or radio. But even though we cannot answer back, the techniques of Close Reasoning are very valuable in helping us to grasp the true meaning of a presentation, and to assess it properly.

Skill in Close Reasoning is also helpful when we play the role of presenter. (Students find themselves most frequently in this role when they are obliged to write essays.) Rhetoric, the art of presenting a case persuasively, has been traditionally viewed as a sort of 'sister science' to logic, and is also helpful to the presenter. The relation between logic and rhetoric will be examined in other Notes.



## 2. Close Reasoning: Why

It should be pretty obvious why Close Reasoning is important. The *Port-Royal Logic*, a famous textbook of the 17th century, had it about right:

### • *The Port Royal Logic*: (1662)

There is nothing more desirable than good sense, and accuracy of thought, in discriminating between truth and falsehood. All other qualities of mind are of limited use; but exactness of judgment is of general utility in every part, and in all the employments of life. It is not alone in the sciences that it is difficult to distinguish truth from error, but also in the greater part of those subjects which men discuss in their everyday affairs. There are, in relation to almost everything, different routes—the one true, the other false—and it is reason which must choose between them. Those who choose well, are they who have minds well-regulated; those who choose ill, are they who have minds ill-regulated: and this is the first and most important difference which we find between the qualities of men's minds.

(Baynes translation, p. 1.7)

Basically, with Close Reasoning we are more likely to find the truth, and to

decide upon the right course of action.

Also, and this is a very important point, as Close Reasoners, we are more likely to help those with whom we associate to do the same thing. And it is essential that we be Close Reasoners if we are properly to perform our many public roles in a democracy.

We can look at this last point from the other side. It is important to the rest of *us* that *you* reason closely: democracy depends on the good sense of its citizens, and collapses when that good sense goes off the rails, or is overwhelmed by passion. The history of Europe in the 1930's is one illustration of that.

Nor is Close Reasoning as widespread in our society as we could wish. On a by no means unusual day in 1987 a newspaper<sup>8</sup> carried the story of a professor writing a grade 12 text book on astronomy for use in Ontario schools who had been asked to replace the word "evolution" by "change" or "development" when describing the history of the universe.

### • Said the professor:

The person involved said that if he used the word 'evolution' he would get 600 letters from Creationists, and they [the Ministry of Education] would have to deal with this and they have better things to do with their time. . .

And a spokesman for the ministry explained that they are sensitive to the passions stirred by the word "evolution", "just like the word 'abortion' raises hackles." So the loose reasoning of the Creationists is to keep young people from learning standard scientific terminology.

The same paper had a story about the Jehovah's Witness cult, and the misery experienced by individuals whose reasoning leads them to leave it, and who are then cruelly 'shunned' by family and friends still in the cult. Irrational beliefs do not harm only the ones who have them.

And the radio news told of Matilda township in eastern Ontario, which had declared itself officially English to forestall what is there perceived to be a creeping francophone *coup d'état*. Loose reasoning generates unreason-

able fear, which generates foolish and mean-spirited action.

It is very likely that the general level of reasoning is higher now than in previous ages, when education was restricted to a much smaller segment of the population. But that is no ground for smug satisfaction. The *National Inquirer* still publishes. Respectable newspapers still carry horoscopes. Wintario lottery tickets are still purchased. People still smoke. AIDS still spreads. Question Period in Parliament still is as it is. Students still pay large fees to come to university and then cut class.



### 3. Close Reasoning: How

Reasoning, especially Close Reasoning, is an acquired skill. You get better at it by practice, and by learning rules and techniques. The rules and techniques are what the *LCR* is for.

Reasoning, of course, also takes a certain natural aptitude, but everyone who is allowed out without an attendant has an adequate supply of that. It also requires knowing how, and so learning how. And everyone, certainly every reader of the *LCR*, has already learned to some degree, a considerable degree, most likely. But it is possible through study to go beyond this ordinary level, and the higher levels are what we have in mind when we speak of Close Reasoning. This point is well made by Watts.

#### • Isaac Watts:

*Reason*, as to the *Power* and *Principles* of it, is the common Gift of God to all Men; though all are not favoured with it by Nature in an equal degree: But the *acquired Improvements* of it in different Men, makes a much greater Distinction between them than Nature had made.

(*Logick*, p. 1)

What he is saying is that while there may be some inborn differences between people in reasoning ability, the main thing is learning how to do it. Promoting these 'acquired Improvements' is the whole purpose of the

*LCR*.

#### • Watts adds:

I could even venture to say, that the *improvement of Reason* hath raised the Learned and the Prudent in the European World, almost as much above the *Hottentots*, and other savages of *Africa*, as those Savages are by Nature superior to the Birds, the Beasts, and the Fishes.

In line with this, we may say that the aim of the *LCR* is to help its readers to join the ranks of the Learned and the Prudent, in the European or any other World.

We close by noting that the latter part of this passage presents a nice exercise in Close Reasoning. People sometimes say that Watts's disparaging remark about Hottentots and the savages of Africa shows him to have been some kind of racist, or perhaps a 'cultural chauvinist'. Do they really? ♦

### NOTES

1. Many people would say that some of these things *shouldn't* be looked at from that point of view, even if they could be. For example, Romantics are leery of trying to apply reason to emotion, the devout often oppose the application of reason to faith, and the loyally obedient sometimes live by the lines "Ours is not to reason why, ours is but to do or die." There are important philosophical issues here to be examined, perhaps, in some other Note.
2. Translation by Harold Cooke in the Loeb series.
3. Except the trivial case of inferring from truths of logic, about which more in another Note.
4. Isaac Watts, *Logic: or the Right Use of Reason in the Inquiry after Truth* (London, 1754), p. 1. [First published 1724.]
5. For one account (there are many) see the article "Yellow Rain: The Story Collapses" by Julian Robinson, Jeanne Guillemin and Matthew Meselson in *Foreign Policy*, no. 68 (Fall, 1987), pp 100-117.
6. "Dialogue is not necessarily the talk of two persons; it means conversation as opposed to monologue, to preaching, lecturing, speeches, narrative, or description; see *DUOLOGUE*." (Fowler, *Modern English Usage*, p. 128). The trouble is that some people confuse the prefix "dia" of "dialogue", which means *across* or *through*, with the prefix "di", which means *two*. Dialogue

is simply something done through talking.

7. Antoine Arnauld and Pierre Nicole, *La Logique, ou l'Art de Penser*, [*Logic, or the Art of Thinking*], commonly known as the *Port Royal Logic*, first published in Paris, 1662; translation by Thomas Spencer Baynes, first published Edinburgh, 1851. This was a very famous and popular logic book, and there have been numerous editions and translations. A lot of the book by Watts is based on it.
8. *The Globe and Mail*, Toronto, July 25, 1987.

### ILLUSTRATIONS

(P. 1) The Beck mansion, Richmond and St. James, now dismantled to make room for a condominium. The developers have promised to rebuild the mansion on the southwest corner of the property.

(Pp. 2, 3) The notorious Talbot 'street-scape.' These buildings, across from the Market, now stand boarded up and derelict while the City debates how much destruction a developer is to be allowed to do to them.

While they still stand, Close Reasoners resident in London may wish to go down and see them. They could then go on into the Market to see, mounted near the main King Street entrance, the large copy of the 1883 painting by Paul Peel of the Covent Garden Market; some of the Talbot Street buildings are in the background. And then, after a quick glance down King Street to see how it is compelled to tunnel under the new 'Galeria' shopping mall, they may wish to go around the corner on Dundas Street to the London Regional Art Gallery to see the actual painting.

The *LCR* will not here comment on the reasoning of London city officials.



**The London Close Reasoner**

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